

ABSTRACT

An air-fuel ratio control apparatus for an internal combustion engine, implementing integral correction of the air-fuel ratio by an integral term edf_{ii} obtained by multiplying an integrated difference between a target air fuel ratio and the actual air-fuel ratio by an integral gain, wherein the upper and lower limit values of the integral term are set based on the actual intake air amount and the actual air-fuel ratio. This limits the range of the integral term edf_{ii} to prevent it from being set at an excessively high or low level removed from the realities of the intake air amount and the air-fuel ratio, and thereby to prevent erroneous air-fuel ratio correction by the integral term.